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Air Emission Credit Registry Presentation Handout December 2006


Office of Air Quality Emission Credit Registry

Revised Presentation: December 6, 2006
Prepared by Kim Cottrell

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Registry Program Goals

- Assist sources looking for emission offsets for nonattainment New Source Review (NSR) permitting
- Provide a central, publicly available location where information about emission credits can be stored and viewed

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Registry Program Highlights

- **Voluntary participation** – no one is required to use this registry to obtain their emission offsets
- **Market-based system** – entities will trade with each other to obtain emission credits
- **Free Service** – no application fees for the Registry service – only the normal air permitting fees
- **No new rules** – based on what is currently allowed in state rules (326 IAC 2-3-4)
- **Flexible** – only references state rules so the guidance will be updated as rules change, but the program itself doesn't change

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Why Generate Reductions?

- **Health** – Reducing air pollutant emissions will improve the overall air quality in Indiana
- **Offsets** – Reductions can be used to offset increased emissions from growth and expansion projects
- **Economics** – Emission reduction programs often save money through lower fuel usage and using less raw materials and through the sale of emission credits



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Who Will Use the Registry?

- Regulated sources that need to find offsets for expansion projects
- Companies looking to build new manufacturing facilities in nonattainment areas
- Citizens and environmental groups who want to stay informed about Indiana's air quality
- Companies that wish to buy, sell, or trade emission credits



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The Registry Process

- Posting Emission Credits Wish List
- Registering Emission Reductions
- Transferring Registered Emission Credits
- Using Registered Credits



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Posting Emission Credits Wish List

- **Step 1** – Determine what amount of credits will be needed for your new construction or expansion project
- **Step 2** – Apply to post your wish list on the Emission Credit Registry website
- **Step 3** – Verify that the list was posted correctly to the website



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Registering Reductions as Credits

- **Step 1** – Generate permanent, quantifiable, federally enforceable, and surplus reductions in air pollutant emissions
- **Step 2** – Apply for permit or source modification
- **Step 3** – Apply to register the reductions as emission credits
- **Step 4** – Verify that the credits were approved and posted correctly to the website
- **Step 5** – Work with IDEM to resolve any issues that may arise



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Transferring Registered Credits

- **Step 1** – Credit seeker will check the website to locate the type and quantity of emission credits wanted
- **Step 2** – Credit seeker will contact the listed owner of credits to work out the details of the transaction
- **Step 3** – Submit an application to update the Registry to show the new owner of credits
- **Step 4** – Verify that the transfer of credits was accepted and posted correctly to the website



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Using Registered Credits

- **Step 1** – Check the website to locate the type and quantity of emission credits needed
- **Step 2** – Contact the owner of the credits to work out the details of the transaction
- **Step 3** – Apply for any appropriate permit or source modifications
- **Step 4** – Submit an application to update the Registry
- **Step 5** – Work with IDEM to resolve any issues that may arise



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Explanation and Examples

- Generating Emission Reductions
- Registering Reductions as Credits
- Transferring Registered Credits
- Using Valid Credits



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Generating Emission Reductions

- Modifications:
 - Installation of control equipment
 - Changes in process inputs, formulations, products, product mix, or raw materials
 - Reductions in actual emission rates
 - Reductions in operating hours
- Production curtailment or shutdown of emitting sources or facilities – *may not be usable if used in the state's attainment plan*
- Any other enforceable and approved method



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Calculating the Amount of Reduction (Modifications Only)

- **Step 1** – Calculate average actual annual emissions prior to emission reduction using data from the 24 month period immediately preceding the reduction in emissions
- **Step 2** – Calculate annual emission rate following reduction
- **Step 3** – Subtract the annual emissions rate following the reduction from the average actual annual emissions prior to the reduction



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Calculating the Amount of Reduction (Curtailment Only)

- **Step 1** – Calculate average actual annual emissions prior to curtailment using data from the 24 month period immediately preceding the reduction in emissions
- **Step 2** – Calculate allowable annual emission rate following curtailment
- **Step 3** – Subtract the allowable annual emissions rate following the curtailment from the average actual annual emissions prior to the curtailment



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Emissions Calculations Methodology

- The following methods are acceptable for calculating the quantity of emission reductions:
 - AP-42 Compilation of Air Pollutant Emission Factors
 - Stack Test Data
 - Continuous Emissions Monitoring System (CEMS) Data
 - Other approved methods



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Registering Reductions as Credits

- Registry only includes Indiana reductions
- Registry covers all criteria air pollutants, but not hazardous air pollutants
- Registry only includes stationary sources
- Reductions must be
 - Permanent
 - Quantifiable
 - Federally Enforceable
 - Surplus



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Conditions that Qualify the Credits

- **Permanent:** assured for the life of the emissions unit through an enforceable mechanism
- **Quantifiable:** amount, rate and characteristics are measurable or calculated through a reliable and approved method
- **Enforceable:** authority to enforce the requirements that sustain the reduction
- **Surplus:** voluntary reductions and in excess of those required by any local, state, or federal requirement



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Transferring Credits

- The Generator is the original "owner" of the emission credit
- Credits may be transferred by any means of conveyance permitted under state and federal laws
- The Registry must be updated once transfers are complete so the appropriate "owner" contact information is displayed in the summary table on the public website



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Using Valid Credits

- Credits for a criteria pollutant may only be used to offset emissions of that same criteria pollutant.
- Credits are generally used to offset emissions within the nonattainment area where the reductions were generated.
- Registered credits are not usable after a certain amount of time has passed
- “Offsets” versus “Netting”



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“5 Years Plus Time For Construction”

- **326 IAC 2-3-4(d)**: a decrease in emissions may be credited for offset purposes only if it occurs between the date 5 years before construction commences on a proposed physical or operational change and the date the increase in actual emissions from that change occurs.



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“Offsets” versus “Netting”

- **Pure Offset**: Source A reduces emissions to offset the increase in emissions generated when Source B expands production, or when Source C builds a new manufacturing plant
- **Internal Netting**: Source A reduces emissions in one area of production to internally offset an increase in emissions that will be created when Source A expands production in another area of the plant



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Additional Documents / Questions

- **Registry website** – answers several common questions about the Registry
- **Fact sheet** – one page summary of program
- **Application forms and instructions** – explains in detail the process for:
 - [Registering emission credits](#)
 - [Transferring emission credits](#)
 - [Using emission credits](#)
 - [Posting and emission credit wish list](#)



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For More Information...

Air Emission Credit Registry

www.emissionscredit.in.gov

Jed Wolkins or Kim Cottrell
Indiana Dept. of Environmental Management
Office of Air Quality – Permits Branch
1-800-451-6027 or 317-233-0178



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For More Information...

New Source Review Air Permitting

www.in.gov/idem/air/8hourstandard/index.html

www.in.gov/idem/air/pm25standard/index.html

Air Permit Reviewer of the Day
Indiana Dept. of Environmental Management
Office of Pollution Prevention and Technical Assistance
1-800-451-6027 or 317-233-0178



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